### INVITATION FOR BIDS (IFB) NO. 97-100

TO

### FURNISH AND DELIVER

HIGH BIT-RATE DIGITAL SUBSCRIBER LINE (HDSL) EQUIPMENT

ON A REQUIREMENTS BASIS

FOR THE

UNIVERSITY OF HAWAII

HONOLULU, HAWAII

APRIL, 1997

BOARD OF REGENTS
UNIVERSITY OF HAWAII
HONOLULU, HAWAII

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IT IS THE RESPONSIBILITY OF ALL BIDDERS TO CHECK THE TABLE OF CONTENTS TO CONFIRM THAT ALL PAGES LISTED THEREIN ARE CONTAINED IN THEIR BID PACKAGE.

### BIDDER'S REMINDER:

Tax Clearance Certificate or OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, (see Special Provisions).

### NOTICE TO BIDDERS

BID FORMS for IFB No. 97-100, High Bit-Rate Digital Subscriber Line (HDSL) Equipment, will be available from and received in the OFFICE OF PROCUREMENT, PROPERTY AND RISK MANAGEMENT, UNIVERSITY OF HAWAII, 1400 LOWER CAMPUS ROAD, ROOM 15, HONOLULU, HAWAII 96822, (an unofficial copy of the IFB is available on the Internet at http://www.state.hi.us/bids/notice01.htm) and must be submitted no later than 2:30 p.m., May 6, 1997, and at that time will be publicly opened.

Bids received after the time and date fixed for opening will not be considered.

Vendors located outside the Island of Oahu, Hawaii, USA, may request an official copy of the IFB by providing the vendor's name, address, contact person, telephone number, facsimile number, and an account number, billable to the receiver, for express shipment.

Requests may be submitted via facsimile, (808) 956-2093. Direct all questions to Bruce Isaacs, (808) 956-8634.

Kenneth P. Mortimer
President, University of
 Hawaii and Chancellor,
 University of Hawaii at Manoa

Advertised: Honolulu Advertiser

Issue of: April 23, 1997

# OPPRM FORM 115 BUSINESS CLASSIFICATION CERTIFICATION STATEMENT

(See Official Document)

#### BID FORM

TO

#### FURNISH AND DELIVER

## HIGH BIT-RATE DIGITAL SUBSCRIBER LINE (HDSL) EQUIPMENT ON A REQUIREMENTS BASIS

Office of Procurement, Property and Risk Management University of Hawaii 1400 Lower Campus Road, Room 15 Honolulu, Hawaii 96822

To Whom It May Concern:

The undersigned has carefully examined the INVITATION FOR BIDS (IFB) NO. 97-100, TO FURNISH AND DELIVER HIGH BIT-RATE DIGITAL SUBSCRIBER LINE (HDSL) EQUIPMENT ON A REQUIREMENTS BASIS FOR THE UNIVERSITY OF HAWAII, HONOLULU, HAWAII, and offers to furnish and deliver the equipment for an initial period of ONE (1) year, and thereafter, may be renewed for FOUR (4) additional years, for a total of FIVE (5) years, commencing on the dated designated in the Notice to Proceed, in strict accordance with the true intent and meaning of the Invitation for Bids (IFB), as follows:

### BASIC BID

<u>Item</u>	Description	Est. Qty.	<u>Unit Price</u>	Total Amount
1.	Rack-Mounted Chassis, PairGain Campus-Star or acceptable alternate, as per Technical Specifications.	2	\$	\$
	Manufacturer and Model No. Off	ered ——		
2.	Chassis Management Unit, PairGain Campus-Star Managemen Unit or acceptable alternate, as per Technical Specification		\$	\$
	Manufacturer and Model No. Off	ered		
3.	Chassis 100-240VAC Power Supply, PairGain Campus-Star 100-240 VAC Power Supply or acceptable alternate, as per Technical Specifications.	5	\$	\$
	Manufacturer and Model No. Off	ered		
4.	Chassis -48VDC Power Supply, PairGain Campus-Star 48 VDC Power Supply or acceptable alternate, as per Technical Specifications.	1		\$
	Manufacturer and Model No. Off	ered		
5.	T-1 HDSL Line Unit for Chassis, PairGain Campus-Star T-1 Line Unit or acceptable alternate, as per Technical Specifications.	28	\$	\$
	Manufacturer and Model No. Off	ered		
		_		

<u>Item</u>	Description	Qty.	<u>Unit Price</u>	Total Amount
6.	Standalone HDSL Unit, PairGain Campus-Star T-1 or acceptable alternate, as per Technical Specifications.	24	\$	\$
	Manufacturer and Model No. Off	ered		
7.	Ethernet Remote Bridge Interface Card for Chassis and Standalone Unit, PairGain Campus-REX or acceptable alternate, as per Technical Specifications.	52	\$	\$
	Manufacturer and Model No. Off	ered		
8.	DSX-1 Interface Card for Chassis and Standalone Units, PairGain Campus DSX-1 Interfact Card for T-1 Applications or acceptable alternate, as per Technical Specifications.	2 e	\$	\$
	Manufacturer and Model No. Off	ered		
9.	V.35 Interface Card for Chassis and Standalone Units, PairGain Campus V.35 Interface Card for T-1 Applications or acceptable alternate, as per Technical Specifications.	2	\$	\$
	Manufacturer and Model No. Off	ered		

<u> Item</u>	Description	Qty.	<u>Unit Price</u>	Total Amount	
10.	Fractional T-1 Interface Card for Chassis and Standalone Units, PairGain Campus-Flex Interface Card for T-1 Applica or acceptable alternate, as per Technical Specifications.	ations	\$	\$	
	Manufacturer and Model No. Offered				
	TOTAL AGGREGATE	BID, IT	EMS 1 - 10 =	\$	

Prices shall be f.o.b. destination, including all applicable taxes. Bidders must bid on all items in order to be considered for award. If there is no cost, a zero "0" shall be placed in the appropriate blank.

### QUANTITIES

The quantities shown in the Bid Form are for bid purposes only and should not be considered firm (estimated quantity to be purchased only by the Information Technology Services Department). In the event that the University's requirements for the equipment do not materialize in the estimated quantities, such event shall not constitute the basis for an equitable price adjustment under this contract. The University reserves the right to order additional quantities or decrease the quantities of each item at the unit prices quoted during the term of the contract.

### TAX LIABILITY

Both out-of-state and Hawaii bidders are advised that the amount bid on this solicitation is subject to the general excise tax (currently 4%) imposed by Chapter 237, Hawaii Revised Statutes (HRS) and, if tangible property is being imported into the State of Hawaii for resale, the use tax (currently 1/2%) imposed by Chapter 238, HRS. (Refer to Tax Clearance in the Special Provisions and Taxes in the General Provisions.) Bidders are therefore cautioned to consider such taxes in formulating their bids since no adjustments to the prices bid shall be allowed.

### BASIS FOR AWARD

The award of contract, if awarded, shall be made to the lowest responsive and responsible bidder on the **TOTAL AGGREGATE BID** (Items 1 - 10).

### NOTE TO BIDDERS

An acceptable bid must conform in all material respects to this Invitation for Bids. Any of the following may be grounds for disqualification:

- 1. Taking exception to any of the specifications, terms or conditions contained in the IFB.
- 2. Placing conditions on the furnishing of solicited goods or services.
- 3. Inclusion of a quotation or order form containing additional specifications, terms or conditions.
- 4. Referencing external documents containing additional specifications, terms or conditions.

Bidders are advised that bids are evaluated as submitted and requests by bidders to delete conditions contained in their bids after bid opening cannot be considered.

In the event that the undersigned is awarded this contract and its remittance address differs from the address shown on the next page, please indicate remittance address below:

Street	Address	or	P.	0.	Box
City	State		Z:	ip (	Code

### INFORMATION REQUIRED FROM BIDDER

Bidder is required to furnish the following information as part of the bid. The University reserves the right to reject the bid submitted by any bidder who does not provide complete information, whose performance on other jobs has been unsatisfactory, and who does not demonstrate that they can comply with the terms and conditions of the bid.

1.	Name of Company	-
	Street Address	-
	City and State	
	Phone Number	
	Fax Number	-
	E-Mail Address	(if available)
	World Wide Web Address	(if available)
2.	Name of Account Manager responsible for University account	of Hawaii
3.	References (Firms where similar equipment has bee	n provided.)
	Name of Firm Address Contact Person	Phone No.
	1)	
	2)	
	3)	
TYP:	ED NAME OF COMPANY REPRESENTATIVE	
SIG	NATURE	
TIT	LE	
TEL	F.PHONE	

### SIGNATURE PAGE

(See Official Document)

### CERTIFICATION FOR TAX CLEARANCE

RE:	IFB No.:	
	Project/Title:	
		ve submitted a State and IRS tax clearance application mail on,
	nave not receive	(date) ed an original or certified copy at the time I c.
	receipt of a ta ified copy by ma	ax clearance, I will immediately send an original or ail to:
		Office of Procurement, Property and Risk Management University of Hawaii 1400 Lower Campus Road, Room 15 Honolulu, Hawaii 96822
		Signature (Original):
		Printed Name:
		Title:
		Company Name:
		Date:

#### TECHNICAL SPECIFICATIONS

This section indicates the Technical Specifications for the equipment required. The Technical Specifications listed herein are the minimum requirements and are <u>mandatory</u> for an accepted bid.

## Item 1: Rack-Mounted Chassis, PairGain Campus-Star or acceptable alternate with the following specifications:

- 1. Shall be rack-mountable in 19" and 23" rack.
- 2. Minimum capacity: (able to accommodate)
  - a. One (1) management unit.
  - b. Two (2) power supplies (redundant).
  - c. Fourteen (14)-line units.
  - d. Fourteen (14) interface cards.
- 3. Shall have individual DB-15 HDSL line connectors and high-density 50-pin Telco connectors.
- 4. Temperature conditions: 0 to 50° C (10 to 85% relative humidity) or better.
- 5. Electromagnetic emissions: per FCC Part 15 Class A.
- 6. Safety compliance: UL, CSA.

## Item 2: Chassis Management Unit, PairGain Campus-Star Management Unit or acceptable alternate with the following specifications:

- 1. Shall have LCD display.
- 2. Shall have status and alarm LEDs.
- 3. Shall have DB-9 RS-232 console port.
- 4. Shall have LCD display with controls for status and configuration.
- 5. Shall have SNMP/UDP/IP/ICMP/ARP.
- 6. Shall have BOOTP and TFTP.
- 7. Shall have SLIP.
- 8. Shall have embedded SNMP Agent in local flash memory.
- 9. Shall have software usage license.
- 10. Electromagnetic emissions: per FCC Part 15 Class A.
- 11. Safety compliance: UL, CSA.

### Item 3: Chassis 100-240VAC Power Supply, PairGain Campus-Star 100-240 VAC Power Supply or acceptable alternate, with the following specifications:

- 1. Shall have input and output indicators.
- 2. Electromagnetic emissions: per FCC Part 15 Class A.
- 3. Safety compliance: UL, CSA.

## Item 4: Chassis -48VDC Power Supply, PairGain Campus-Star 48 VDC Power Supply or acceptable alternate, with the following specifications:

- 1. Shall have input and output indicators.
- 2. Electromagnetic emissions: per FCC Part 15 Class A.
- 3. Safety compliance: UL, CSA.

### <u>Item 5: T-1 HDSL Line Unit for Chassis, PairGain Campus-Star T-1</u> <u>Line Unit or acceptable alternate, with the following specifications:</u>

- 1. Shall have range of 12kft or greater over unconditioned 24Ga UTP cable.
- 2. Shall have Bit Error Rate (BER) of 10<sup>-10</sup> or better.
- 3. Shall have status LEDs for Sync, Alarm, and Loopback.
- 4. Shall have line unit console port.
- 5. Shall have one-way transmission delay of less than 300 microseconds or better.
- 6. Shall have performance monitoring for:
  - a. Errored seconds and unavailable seconds in last 24 hours in 15-minute intervals.
  - b. Errored seconds and unavailable seconds in last 7 days in 24-hour intervals.
  - c. HDSL line attenuation.
  - d. Signal/noise margin on HDSL lines.
- 7. Temperature conditions: 0 to 50° C (10 to 85% relative humidity or better).
- 8. Electromagnetic emissions: per FCC Part 15 Class A.
- 9. Safety compliance: UL, CSA.

### <u>Item 6: Standalone HDSL Unit, PairGain Campus T-1 or acceptable</u> alternate, with the following specifications:

- 1. Shall have range of 12kft or greater over unconditioned 24Ga UTP cable.
- 2. Shall have Bit Error Rate (BER) of  $10^{-10}$  or better.
- 3. Shall have internal 100-240VAC power supply.
- 4. Shall have one (1) interface card slot.
- 5. Shall have RJ-48C connector.
- 6. Shall have RS-232C on RJ-45 (DCE) console port.
- 7. Shall have LCD display with controls for status and configuration.
- 8. Shall have Alarm and Status indication LEDs.
- 9. Shall have performance monitoring for:
  - a. Errored seconds and unavailable seconds in last 24 hours in 15-minute intervals.
  - b. Errored seconds and unavailable seconds in last 7 days in 24-hour intervals.
  - c. HDSL line attenuation.
  - d. Signal/noise margin on HDSL lines.
- 10. Temperature conditions: 0 to 50° C (10 to 85% relative humidity or better).
- 11. Electromagnetic emissions: per FCC Part 15 Class A.
- 12. Safety compliance: UL, CSA.

# Item 7: Ethernet Remote Bridge Interface Card for Chassis and Standalone Units, PairGain Campus-REX or acceptable alternate, with the following specifications:

- 1. Shall have one (1) 10BASE-T port for LAN connection.
- 2. Shall have low-overhead HDLC encapsulation.
- 3. Shall have full IEEE 802.1d transparent MAC-layer bridging.
- 4. Shall have dynamic address learning.
- 5. Shall have spanning tree protocol.
- 6. Full bandwidth filtering at 14kbps (64-byte packets both directions) or better.

- 7. Forwarding at 4kbps (64-byte packets both directions) or better.
- 8. Shall have learning for 2000 MAC addresses with aging or better.
- 9. Shall have transparent full-duplex operation.
- 10. Temperature conditions: 0 to 50° C (10 to 85% relative humidity or better).
- 11. Electromagnetic emissions: per FCC Part 15 Class A.
- 12. Safety compliance: UL, CSA.

# Item 8: DSX-1 Interface Card for Chassis and Standalone Units, PairGain Campus DSX-1 Interface Card for T-1 Applications or acceptable alternate, with the following specifications:

- 1. Input: 0 to -7.5 dB.
- 2. Output line buildout: selectable 0 to 655 feet in five (5) steps or better.
- 3. Data rate: 1.544 Mbps.
- 4. Impedance: 100 ohms.
- 5. Connectors: RJ-48C and DB-15F.
- 6. Alarm: 1-C Dry contacts on pins 6, 7, 8 (DB-15F) or acceptable alternate.
- 7. Temperature conditions: 0 to 50°C (10 to 85% relative humidity or better).
- 8. Electromagnetic emissions: per FCC Part 15 Class A.
- 9. Safety compliance: UL, CSA.

## Item 9: V.35 Interface Card for Chassis and Standalone Units, PairGain Campus V.35 Interface card for T-1 Applications or acceptable alternate, with the following specifications:

- 1. Shall have Transmit Data, Transmit Timing, Receive Data, Receive Timing, External Timing, 8 Control Lines.
- 2. Date Rate: 1.544, 1.536, or .1344 Mbps selectable (±100 ppm).
- 3. Connector: AMP 34-pin Type-F, DCE or DTE (soft selectable).
- 4. Temperature conditions: 0 to 50° C (10 to 85% relative humidity or better).
- 5. Electromagnetic emissions: per FCC Part 15 Class A.

6. Safety compliance: UL, CSA.

Item 10: Fractional T-1 Interface Card for Chassis and Standalone Units, PairGain Campus-Flex Interface Card for T-1 Applications or acceptable alternate, with the following specifications:

- 1. Shall have at least two (2) RS-530 data ports:
  - a. Shall have Transmit Data, Transmit Timing, Receive Data, Receive Timing, External Timing, 8 Control Lines.
  - b. Data Rate: nx56 Kbps or nx64 Kbps.
  - c. Impedance: 100 ohms.
  - d. Connector: DB-25F, DCE.
- 2. One (1) DSX-1 port:
  - a. Input: 0 to -7.5 dB.
  - b. Output Line Buildout: shall be selectable 0 to 655 feet in five steps or better.
  - c. Clock Rate: 1.544 Mbps.
  - d. Data Rate: kx64 Kbps where k = 24 less the number of time slots used by the two (2) RS-530 ports.
  - e. Impedance: 100 ohms.
  - f. Connector: RJ-48C.
- 3. Shall be full soft configuration.
- 4. Temperature conditions: 0 to 50° C (10 to 85% relative humidity or better).
- 5. Electromagnetic emissions: per FCC Part 15 Class A.
- 6. Safety compliance: UL, CSA.

All questions pertaining to the Technical Specifications shall be directed to Steven Goto, telephone (808) 956-5455, fax (808) 956-5150.

Bidders are cautioned to review the Technical Specifications carefully and thoroughly. Objections to or requests for clarification of the specifications shall be made in writing in accordance with the General Provisions to the Office of Procurement, Property and Risk Management prior to the submittal of a bid. The submittal of a bid shall be considered as acceptance of the specifications as published.

### SPECIAL PROVISIONS

### 1. SCOPE

The Furnishing and Delivering of High Bit-Rate Digital Subscriber Line (HDSL) Equipment for Information Technology Services, University of Hawaii, shall be in accordance with the terms and conditions of IFB No. 97-100 and the General Provisions dated February 23, 1996 included by reference. Copies of the General Provisions are available at the Office of Procurement, Property and Risk Management, University of Hawaii, 1400 Lower Campus Road, Room 15, Honolulu, Hawaii 96822 or the General Provisions may be viewed at: http://www.state.hi.us/bids/notice03.htm

### 2. TECHNICAL REPRESENTATIVE OF THE PROCUREMENT OFFICER (TRPO)

The Technical Representative of the Procurement Officer is Steven Goto, telephone (808) 956-5455, fax (808) 956-5150.

### 3. SUBMITTAL OF TECHNICAL DATA

With their bids, bidders shall submit, in duplicate, manufacturer's literature or brochures with technical data and illustrations of the equipment being offered.

### 4. BRAND NAME OR EQUAL

The brand name and model number(s) mentioned are used in this specification as a measure of quality and performance. Any brand or manufacture of equal or better quality and performance than that specified will be considered for acceptance by the University. However, the University reserves the right to reject and deny any substitution that it may, in its discretion, deem unequal, and the findings in this regard shall be accepted by the bidder as final and binding.

### 5. DELIVERY

Prior to delivery, the Contractor shall contact the department listed on the purchase order to confirm the order and to coordinate delivery of the equipment.

All items purchased under this contract shall be delivered within FOURTEEN (14) consecutive calendar days after receipt of the purchase order by the Contractor. Delivery shall be made to the department and address shown on the purchase order.

### 6. SUPPORT AND SERVICES

a. The Contractor shall respond to informational inquiries about products purchased under this contract when contacted by the University departments. The Contractor shall have a

permanent office location from which to conduct its business and shall provide a toll-free telephone number for University departments to utilize regarding matters which require immediate attention.

- b. The Contractor shall provide technical support upon request from the University whenever there are problems with installation of the products purchased under this contract.
- c. The Contractor shall contact the University whenever the terms and conditions of the contract cannot be performed.

### 7. TERM OF CONTRACT

The Contractor shall enter into a contract with the University for an initial period of ONE (1) year commencing on the date designated in the Notice to Proceed, and the unit price(s) bid shall remain firm for the initial term of the contract. Thereafter, the contract shall be renewable from year to year, for a total of FIVE (5) years, without the necessity of rebidding, upon mutual agreement in writing, NINETY (90) days prior to the annual renewal date. The contract price for each renewal period shall remain the same or lower than the initial bid price or may be adjusted in accordance with SPECIAL PROVISION 8, ESCALATION CLAUSE, of the contract, upon written request of the Contractor. Further, the University may terminate the contract at any time, after the first year, upon NINETY (90) days' prior written notice.

### 8. ESCALATION CLAUSE

The Contractor shall be allowed to request adjustments to the contract price for each contract renewal period, NINETY (90) days prior to contract renewal date, provided that the contract price for each renewal period shall not increase more than 5% (or) more than the Consumer Price Index for Pacific Cities and U. S. City Average based on All Urban Consumers, U. S. City Average, in effect ONE HUNDRED TWENTY (120) days prior to the renewal date, whichever is less, and provided, further, that the request is made in writing to the University.

### 9. MANUALS AND INSTRUCTIONS

The Contractor shall provide the University with instructional, and operational manuals for the equipment (for each product delivered) furnished under this contract.

### 10. WARRANTY

The equipment furnished shall be new and as specified. The Contractor shall warrant that all workmanship and materials of equipment furnished under this contract shall be guaranteed for a period of THREE (3) years from the date of acceptance. The

Contractor shall replace and/or repair any defective workmanship and/or materials at no cost to the University during the period of warranty, provided such defects are not due to abuse or negligence on the part of the University.

### 11. REQUIREMENTS

This is a requirements contract for the equipment specified in the Bid Form and for the period set forth herein. Delivery shall be made only as authorized by purchase orders issued in accordance with the clause entitled "Ordering."

### 12. ORDERING

Orders shall be placed by the issuance of purchase orders by authorized individuals of the various departments of the University of Hawaii. Purchase orders may be issued under this contract from the date designated in the Notice to Proceed for a ONE (1)-year period.

All purchase orders issued hereunder shall reference the contract number and shall be subject to the terms and conditions of this contract. This contract shall control in the event of conflict with any purchase order.

When mailed, a purchase order shall be "issued" for purposes of this contract at the time the University deposits the purchase order in the mail.

Purchase orders, when issued, shall specify the following:

- a. Type and number of units.
- b. Delivery location(s).

If additional features to the item(s), or new models of item(s) which perform a similar function become available during the period of this contract, the University shall be able to order the updated features or new models. The contract shall be modified by establishing the new prices through the issuance of a supplemental agreement to the contract.

### 13. PAYMENT

The Contractor shall be remunerated upon submission of a properly executed original invoice and ONE (1) copy, indicating the contract number, to the University department and address listed on the purchase order, no later than THIRTY (30) calendar days following submission of invoice and the satisfactory delivery and acceptance of goods.

### 14. TAX CLEARANCE FOR CONTRACTS

In accordance with Section 103-53, HRS, bidders shall submit with their bid packages, original tax clearances from the State of Hawaii Department of Taxation and the Internal Revenue Service. In the event bidders are unable to obtain a tax clearance by mail in time to include it with their bid packages, bidders may submit a completed OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, in place of the DOTAX Form A-6, with their bid packages. However, an original tax clearance must be provided before contract award. Tax clearances obtained shall certify that all tax returns due have been filed, and all taxes, interest, and penalties levied or accrued under the provisions of Title 14 that are administered by the State of Hawaii Department of Taxation and under the Internal Revenue Code against the bidder, have been paid. This shall apply to all contracts, whether with Hawaii bidders, out-of-state bidders, or nonprofit organizations.

This shall not apply to bidders if the State of Hawaii Department of Taxation certifies that the bidder is in good standing under a plan in which delinquent taxes are being paid to the State of Hawaii Department of Taxation (and the Internal Revenue Service, if applicable) in installments.

Offers that are not accompanied by original tax clearances or OPPRM Form 128, CERTIFICATION FOR TAX CLEARANCE, may be considered as non-responsive and may be rejected.

Any questions pertaining to tax clearances may be addressed to the following:

- a. Internal Revenue Service, Compliance Division LTC 300 Ala Moana Boulevard, #50089
  Honolulu, Hawaii 96850-4922
  Telephone No.: (808) 541-1160
- b. Department of Taxation
  State of Hawaii
  Oahu District Office
  P.O. Box 259
  Honolulu, Hawaii 96808-0259
  Telephone No.: (808) 587-4242
  Toll-Free: 1-800-222-3229